

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of operating a gas turbine power plant ~~comprising wherein~~ the power plant is comprised of:

a first gas turbine group, ~~consisting~~ comprised of a first compressor and a first turbine which are connected mechanically with one another, [[and]]

a second gas turbine group, ~~including~~ comprised of a combustion device, which is placed in [[the]] a gas flow stream between the first group's first compressor and first turbine, ~~whereby the second gas turbine group consists of a~~ second compressor, a fuel injection device, a combustion chamber and a second turbine, ~~whereby the second gas turbine group's~~ second compressor and second turbine are mechanically coupled to one another, and

at least one of the first and second gas turbine groups having a device for the extraction of useful work, ~~characterised by the fact that~~

the method comprising:

producing flue gas from the first turbine and heating a first flow of water and/or steam is heated with heat from the flue gas from the first group's turbine, that compressing the gas stream from the first turbine in the first compressor, using heat from the compressed gas stream for heating further amounts of water and/or steam are heated with heat from [[a]] the gas stream that is compressed by the first group's first compressor, [[and]]

injecting the produced water and/or steam is injected into the gas flow stream in such amounts that at least 60% of the oxygen content of the air in the gas flow stream is consumed through combustion in the combustion device, and in that the

feeding combustion gas that is fed into the second turbine of the second gas turbine group [[has]] at a pressure in the range 50-300 bar.

2. (Currently Amended) A method according to claim 1, ~~wherein that said~~ further comprising injecting the further amount of water is introduced into the gas stream between the first group's first compressor and the second gas turbine group's second compressor.

3. (Currently Amended) A method according to claim 2, wherein ~~that~~ the further amounts of water that entirely or partially ~~[[has]]~~ have the form of steam optionally ~~[[is]]~~ are introduced in the gas stream downstream of the second gas turbine group's compressor, and are introduced in such amounts that at least 60% of the oxygen content of the air in the gas stream is consumed through combustion in the combustion device.

4. (Currently Amended) A method according to claim 1, ~~wherein by a choice of~~ further comprising choosing operational characteristics such that the temperature of the gas flow entering the first gas turbine group's first turbine is at most 1200°C, ~~preferably 400-1000°C~~; and ~~[[that]]~~ the pressure of the gas flow is between 5-60 bar.

5. (Currently Amended) A method according to claim 1, ~~wherein by a choice of~~ further comprising choosing operational characteristics that ~~[[give]]~~ cause a flue gas exit temperature from the first gas turbine group's first turbine in the ~~region~~ range of 200-500°C.

6. (Currently Amended) A method according to claim 1, wherein ~~by the fact that~~ the first gas turbine group ~~[[is]]~~ comprises a gas turbine unit, which is ~~optimised~~ optimized for non-humidified operation, ~~whereby~~ wherein the gas turbine unit ~~can have~~ has one or multiple shafts and ~~possibly include~~ includes intercooling

7. (Currently Amended) A method according to claim 1, ~~wherein by the fact that~~ further comprising arranging and operating the second gas turbine group's second turbine ~~is arranged and operated~~ so that the pressure of the gas stream from the first gas turbine group's first compressor and to the first gas turbine group's first turbine, respectively, is re-allotted such that the first gas turbine group is well-suited to operate with the media and flow data associated with humidified cycles.

8. (Currently Amended) A method according to claim 6, ~~wherein by the regulation of the~~ further comprising regulating inlet guide vanes of the first compressor of the first gas turbine group to

reduce the flow of air obtained during operation of the power plant, and ~~that the reducing the~~ capacity of the first gas turbine group's first compressor ~~may even be reduced~~ through removing one or more compressor stages thereof.

9. (Currently Amended) A method according to claim 1, ~~wherein by the fact that further~~ comprising complementing the first gas turbine group's first compressor is ~~complemented with~~ an extraction device ~~used and operating the extraction device~~ to extract the compressed air, which is sealed against the axle, and ~~[[the]]~~ complementing the first gas turbine group's first turbine is ~~complemented with~~ an injection device, which is also sealed against the axle, ~~to return and returning~~ the flue gas ~~[[to]]~~ by injection into the first gas turbine group's first turbine.

10. (Currently Amended) A method according to claim 1, ~~wherein by the fact that the exit~~ temperature from further comprising:

choosing an exit temperature of the first gas turbine group's first compressor is chosen to enable ~~[[the]]~~ production of steam of sufficiently high pressure to be used to cool ~~the second gas turbine group's~~ at least one of the second turbine and/or and the combustion chamber of the second gas turbine group.

11. (Currently Amended) A method according to claim 1, ~~wherein by further comprising~~ introducing combustion gases, which enter into the second gas turbine group's second turbine, ~~that have the combustion gases having a pressure in the region of 50-300 bar, preferably 60-200 bar, or most desirably 80-150 bar, and a temperature in the region of 1000-2000 K, preferably 1200-1800 K.~~

12. (Currently Amended) A method according to claim 1, ~~wherein by further comprising~~ humidifying the gas exit flow from the second gas turbine group's second compressor prior to the second gas turbine group's combustion device, ~~preferably~~ by passing at least a part of the ~~said~~ gas flow through a humidifier, ~~whose heat exchanging inlet and outlet gas streams are preferably heat exchanged from the heat exchanger~~ via a recuperator, where ~~[[the]] inlet water to the humidifier are preferably is~~ heated with heat from the gas outlet stream ~~from the first gas~~

~~turbine group's compressor and/or turbine~~ from at least one of the first compressor and the turbine of the first gas turbine group.

13. (Currently Amended) A method according to claim 1, ~~wherein by~~ further comprising using at least a part of ~~[[the]]~~ a water content of the flue gases to provide the process with at least one of feed water ~~and/or~~ and steam.

14. (Currently Amended) A method according to claim 1, ~~wherein by~~ further comprising regulating the output of work from the process through changing the amount of water that is transferred to the gas stream, whereby a lower power output is obtained through a lower degree of humidification.

15. (Currently Amended) A method according to claim 1, ~~wherein by the fact that~~ further comprising introducing at least a part of the steam used for cooling is ~~introduced thereafter to~~ into the gas stream after use for cooling, ~~preferably~~ in the second gas turbine group's combustion chamber, for further use as the working fluid.

16. (Currently Amended) A method according to claim 1, ~~wherein by the fact that~~ no significant amount of heat is transferred to the gas stream between the second gas turbine group's second turbine and the first group's first turbine.

17. (Currently Amended) A method according to claim 1, ~~wherein by the fact that~~ further comprising regulating the second gas turbine group's second compressor is ~~regulated~~ by regulating ~~[[the]]~~ a lead guide vane or by regulating ~~the axle's~~ rotational speed.

18. (Currently Amended) A method according to claim 1, ~~wherein by the fact that~~ at least 10% of the useful work obtained from the process is extracted via a transmission of the second gas turbine ~~group's transmission group~~.

19. (Currently Amended) A method according to claim 1, ~~wherein by the fact that~~ further comprising

arranging a heat ~~exchanger through which water flows, is arranged~~ exchanger in the hot air flow downstream of the first compressor of the first gas turbine group, and flowing water through the heat exchanger for heating of the water, ~~which optionally is preheated~~

preheating the water in an exhaust gas heat exchanger upstream of a flue gas condenser from which the exhaust gas is exhausted from the first gas turbine group to the environment, ~~in that~~ producing the water ~~preferably is produced by the flue gas condenser and in that~~ heating a part flow of said the water, ~~preferably in a preheated condition, is heated by a heat exchanger, [[which]]~~ wherein the water is passed by flue gas from the first turbine of the first gas turbine group, ~~and in that wherein~~ the water which is heated by the heat exchangers ~~and which is possibly at least partially [[is]] transformed into steam, and the water is fed into one of the combustion chamber, the second turbine of the second gas turbine group or the compressed gas flow from the compressor of the second gas turbine group, for cooling [[of]] the second turbine of the second gas turbine group.~~

20. (Currently Amended) A method according to claim 19, wherein ~~that~~ the water, which is fed into the combustion chamber, at least partially has the form of steam.

21. (Currently Amended) A method according to claim 19, further comprising ~~wherein by~~ producing steam by an external boiler and feeding the produced steam into one of the combustion chamber, the second turbine of the second gas turbine group or the ~~com-pressed~~ compressed gas flow from the compressor of the second gas turbine group, for cooling of the second turbine of the second gas turbine group.